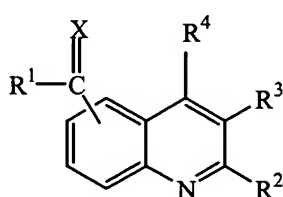


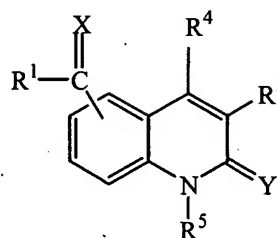
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A radiolabelled compound according to Formula (I-A)* or (I-B)*



(I-A)*

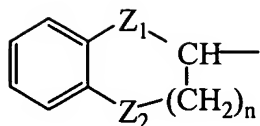


(I-B)*

an *N*-oxide form, a pharmaceutically acceptable addition salt, a quaternary amine and a stereochemically isomeric form thereof, wherein

X represents O; C(R⁶)₂ with R⁶ being hydrogen, aryl or C₁₋₆alkyl optionally substituted with amino or mono- or di(C₁₋₆alkyl)amino; S or N-R⁷ with R⁷ being amino or hydroxy;

R¹ represents C₁₋₆alkyl; aryl; thienyl; quinolinyl; cycloC₃₋₁₂alkyl or (cycloC₃₋₁₂alkyl)C₁₋₆alkyl, wherein the cycloC₃₋₁₂alkyl moiety optionally may contain a double bond and wherein one carbon atom in the cycloC₃₋₁₂alkyl moiety may be replaced by an oxygen atom or an NR⁸-moiety with R⁸ being hydrogen, benzyl or C₁₋₆alkyloxycarbonyl; wherein one or more hydrogen atoms in a C₁₋₆alkyl-moiety or in a cycloC₃₋₁₂alkyl-moiety optionally may be replaced by C₁₋₆alkyl, hydroxyC₁₋₆alkyl, haloC₁₋₆alkyl, aminoC₁₋₆alkyl, hydroxy, C₁₋₆alkyloxy, arylC₁₋₆alkyloxy, halo, C₁₋₆alkyloxycarbonyl, aryl, amino, mono- or di(C₁₋₆alkyl)amino, C₁₋₆alkyloxycarbonylamino, halo, piperazinyl, pyridinyl, morpholinyl, thienyl or a bivalent radical of formula -O-, -O-CH₂-O or -O-CH₂-CH₂-O-; or a radical of formula (a-1)



a-1

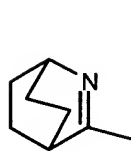
wherein Z_1 is a single covalent bond, O, NH or CH_2 ;

Z_2 is a single covalent bond, O, NH or CH_2 ;

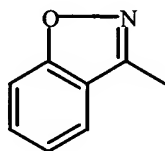
n is an integer of 0, 1, 2 or 3;

and wherein each hydrogen atom in the phenyl ring independently may optionally be replaced by halo, hydroxy, C_{1-6} alkyl, C_{1-6} alkyloxy or hydroxy C_{1-6} alkyl;

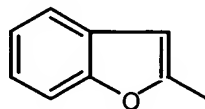
or X and R^1 may be taken together with the carbon atom to which X and R^1 are attached to form a radical of formula (b-1), (b-2) or (b-3);



b-1



b-2



b-3

R^2 represents hydrogen; halo; cyano; C_{1-6} alkyl; C_{1-6} alkyloxy; C_{1-6} alkylthio; C_{1-6} alkylcarbonyl; C_{1-6} alkyloxycarbonyl; C_{1-6} alkylcarbonyloxy C_{1-6} alkyl; C_{2-6} alkenyl; hydroxy C_{2-6} alkenyl; C_{2-6} alkynyl; hydroxy C_{2-6} alkynyl; tri(C_{1-6} alkyl)silane C_{2-6} alkynyl; amino; mono- or di(C_{1-6} alkyl)amino; mono- or di(C_{1-6} alkyloxy C_{1-6} alkyl)amino; mono- or di(C_{1-6} alkylthio C_{1-6} alkyl)amino; aryl; aryl C_{1-6} alkyl; aryl C_{2-6} alkynyl; C_{1-6} alkyloxy C_{1-6} alkylamino C_{1-6} alkyl; aminocarbonyl optionally substituted with C_{1-6} alkyl, C_{1-6} alkyloxy C_{1-6} alkyl, C_{1-6} alkyloxycarbonyl C_{1-6} alkyl or pyridinyl C_{1-6} alkyl; a heterocycle selected from thienyl, furanyl, pyrrolyl, thiazolyl, oxazolyl, imidazolyl, isothiazolyl, isoxazolyl, pyrazolyl, pyridyl, pyrazinyl, pyridazinyl, pyrimidinyl, piperidinyl and piperazinyl, optionally N-substituted with C_{1-6} alkyloxy C_{1-6} alkyl, morpholinyl, thiomorpholinyl, dioxanyl or dithianyl;

a radical -NH-C(=O)R^9 wherein R^9 represents

C_{1-6} alkyl optionally substituted with cyclo C_{3-12} alkyl, C_{1-6} alkyloxy, C_{1-6} alkyloxycarbonyl, aryl, aryloxy, thienyl, pyridinyl, mono- or di(C_{1-6} alkyl)amino, C_{1-6} alkylthio, benzylthio, pyridinylthio or pyrimidinylthio; cyclo C_{3-12} alkyl; cyclohexenyl; amino; arylcyclo C_{3-12} alkylamino; mono-or-di(C_{1-6} alkyl)amino; mono- or di(C_{1-6} alkyloxycarbonyl C_{1-6} alkyl)amino; mono- or di(C_{1-6} alkyloxycarbonyl)amino; mono-or di(C_{2-6} alkenyl)amino; mono- or di(aryl C_{1-6} alkyl)amino; mono- or diarylamino; aryl C_{2-6} alkenyl; furanyl C_{2-6} alkenyl; piperididiny; piperazinyl; indolyl; furyl; benzofuryl; tetrahydrofuryl; indenyl; adamantyl; pyridinyl; pyrazinyl; aryl; aryl C_{1-6} alkylthio or a radical of formula (a-1);

a sulfonamid $\text{-NH-SO}_2\text{-R}^{10}$ wherein R^{10} represents C_{1-6} alkyl, mono- or poly halo C_{1-6} alkyl, aryl C_{1-6} alkyl, aryl C_{2-6} alkenyl, aryl, quinoliny, isoxazolyl or di(C_{1-6} alkyl)amino;

R^3 and R^4 each independently represent hydrogen; halo; hydroxy; cyano; C_{1-6} alkyl; C_{1-6} alkyloxy; C_{1-6} alkyloxy C_{1-6} alkyl; C_{1-6} alkylcarbonyl; C_{1-6} alkyloxycarbonyl; C_{2-6} alkenyl; hydroxy C_{2-6} alkenyl; C_{2-6} alkynyl; hydroxy C_{2-6} alkynyl; tri(C_{1-6} alkyl)silane C_{2-6} alkynyl; amino; mono- or di(C_{1-6} alkyl)amino; mono- or di(C_{1-6} alkyloxy C_{1-6} alkyl)amino; mono- or di(C_{1-6} alkylthio C_{1-6} alkyl)amino; aryl; morpholiny C_{1-6} alkyl or piperidinyl C_{1-6} alkyl; or

R^2 and R^3 may be taken together to form $\text{-R}^2\text{-R}^3\text{-}$, which represents a bivalent radical of formula $\text{-(CH}_2)_3\text{-}$, $\text{-(CH}_2)_4\text{-}$, $\text{-(CH}_2)_5\text{-}$, $\text{-(CH}_2)_6\text{-}$, -CH=CH-CH=CH- , $\text{-Z}_4\text{-CH=CH-}$, $\text{-CH=CH-Z}_4\text{-}$, $\text{-Z}_4\text{-CH}_2\text{-CH}_2\text{-CH}_2\text{-}$, $\text{-CH}_2\text{-Z}_4\text{-CH}_2\text{-CH}_2\text{-}$, $\text{-CH}_2\text{-CH}_2\text{-Z}_4\text{-CH}_2\text{-}$, $\text{-CH}_2\text{-CH}_2\text{-CH}_2\text{-Z}_4\text{-}$, $\text{-Z}_4\text{-CH}_2\text{-CH}_2\text{-}$, $\text{-CH}_2\text{-Z}_4\text{-CH}_2\text{-}$ or $\text{-CH}_2\text{-CH}_2\text{-Z}_4\text{-}$, with Z_4 being O, S, SO_2 or NR^{11} wherein R^{11} is hydrogen, C_{1-6} alkyl, benzyl or C_{1-6} alkyloxycarbonyl; and wherein each bivalent radical is optionally substituted with C_{1-6} alkyl.

or R^3 and R^4 may be taken together to form a bivalent radical of formula -CH=CH-CH=CH- or $\text{-CH}_2\text{-CH}_2\text{-CH}_2\text{-CH}_2\text{-}$;

R^5 represents hydrogen; cyclo C_{3-12} alkyl; piperidinyl; oxo-thienyl; tetrahydrothienyl, aryl C_{1-6} alkyl; C_{1-6} alkyloxy C_{1-6} alkyl; C_{1-6} alkyloxycarbonyl C_{1-6} alkyl or C_{1-6} alkyl optionally

substituted with a radical $C(=O)NR_xR_y$, in which R_x and R_y , each independently are hydrogen, cyclo C_{3-12} alkyl, C_{2-6} alkynyl or C_{1-6} alkyl optionally substituted with cyano, C_{1-6} alkyloxy, C_{1-6} alkyloxycarbonyl, furanyl, pyrrolidinyl, benzylthio, pyridinyl, pyrrolyl or thienyl;

Y represents O or S;

or Y and R^5 may be taken together to form $=Y-R^5$ which represents a radical of formula

$-CH=N-N=$ (c-1);

$-N=N-N=$ (c-2); or

$-N-CH=CH-$ (c-3);

aryl represents phenyl or naphthyl optionally substituted with one or more substituents selected from halo, hydroxy, C_{1-6} alkyl, C_{1-6} alkyloxy, phenyloxy, nitro, amino, thio, C_{1-6} alkylthio, halo C_{1-6} alkyl, polyhalo C_{1-6} alkyl, polyhalo C_{1-6} alkyloxy, hydroxy C_{1-6} alkyl, C_{1-6} alkyloxy C_{1-6} alkyl, amino C_{1-6} alkyl, mono-or di(C_{1-6} alkyl)amino; mono-or di(C_{1-6} alkyl)amino C_{1-6} alkyl, cyano, $-CO-R^{12}$, $-CO-OR^{13}$, $-NR^{13}SO_2R^{12}$, $-SO_2-NR^{13}R^{14}$, $-NR^{13}C(O)R^{12}$, $-C(O)NR^{13}R^{14}$, $-SOR^{12}$, $-SO_2R^{12}$; wherein each R^{12} , R^{13} and R^{14} independently represent C_{1-6} alkyl; cyclo C_{3-6} alkyl; phenyl; phenyl substituted with halo, hydroxy, C_{1-6} alkyl, C_{1-6} alkyloxy, halo C_{1-6} alkyl, polyhalo C_{1-6} alkyl, furanyl, thienyl, pyrrolyl, imidazolyl, thiazolyl or oxazolyl;

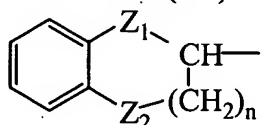
and when the $R^1-C(=X)$ moiety is linked to another position than the 7 or 8 position, then said 7 and 8 position may be substituted with R^{15} and R^{16} wherein either one or both of R^{15} and R^{16} represents C_{1-6} alkyl, C_{1-6} alkyloxy or R^{15} and R^{16} taken together may form a bivalent radical of formula $-CH=CH-CH=CH-$.

2. (Currently Amended) A radiolabelled compound according to claim 1, wherein characterized in that,

X represents O; $C(R^6)_2$ with R^6 being hydrogen or aryl; or $N-R^7$ with R^7 being amino or hydroxy;

R^1 represents C_{1-6} alkyl, aryl; thienyl; quinoliny; cyclo C_{3-12} alkyl or (cyclo C_{3-12} alkyl) C_{1-6} alkyl, wherein the cyclo C_{3-12} alkyl moiety optionally may contain a double bond and wherein one carbon atom in the cyclo C_{3-12} alkyl moiety may be replaced by

an oxygen atom or an NR^8 -moiety with R^8 being benzyl or C_{1-6} alkyloxycarbonyl ; wherein one or more hydrogen atoms in a C_{1-6} alkyl-moiety or in a cycloC_{3-12} alkyl-moiety optionally may be replaced by C_{1-6} alkyl, halo C_{1-6} alkyl, hydroxy, C_{1-6} alkyloxy, aryl C_{1-6} alkyloxy, halo, aryl, mono- or di(C_{1-6} alkyl)amino, C_{1-6} alkyloxycarbonylamino, halo, piperazinyl, pyridinyl, morpholinyl, thienyl or a bivalent radical of formula $-\text{O}-$ or $-\text{O}-\text{CH}_2-\text{CH}_2-\text{O}-$; or a radical of formula (a-1)



a-1

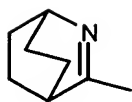
wherein Z_1 is a single covalent bond, O or CH_2 ;

Z_2 is a single covalent bond, O or CH_2 ;

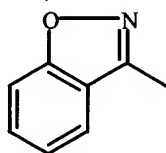
n is an integer of 0, 1, or 2 ;

and wherein each hydrogen atom in the phenyl ring independently may optionally be replaced by halo or hydroxy;

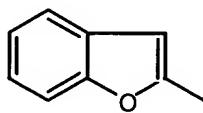
or X and R^1 may be taken together with the carbon atom to which X and R^1 are attached to form a radical of formula (b-1), (b-2) or (b-3);



b-1



b-2



b-3

R^2 represents hydrogen; halo; cyano; C_{1-6} alkyl; C_{1-6} alkyloxy; C_{1-6} alkylthio; C_{1-6} alkylcarbonyl; C_{1-6} alkyloxycarbonyl; C_{2-6} alkenyl; hydroxy C_{2-6} alkenyl; C_{2-6} alkynyl; hydroxy C_{2-6} alkynyl; tri(C_{1-6} alkyl)silane C_{2-6} alkynyl; amino; mono- or di(C_{1-6} alkyl)amino; mono- or di(C_{1-6} alkyloxy C_{1-6} alkyl)amino; mono- or di(C_{1-6} alkylthio C_{1-6} alkyl)amino; aryl; aryl C_{1-6} alkyl; aryl C_{2-6} alkynyl; C_{1-6} alkyloxy C_{1-6} alkylamino C_{1-6} alkyl; aminocarbonyl optionally substituted with C_{1-6} alkyloxycarbonyl C_{1-6} alkyl ;

a heterocycle selected from thienyl, furanyl, thiazolyl and piperidinyl, optionally N-substituted with morpholinyl or thiomorpholinyl;

a radical -NH-C(=O)R^9 wherein R^9 represents C_{1-6} alkyl optionally substituted with cyclo C_{3-12} alkyl, C_{1-6} alkyloxy, C_{1-6} alkyloxycarbonyl, aryl, aryloxy, thienyl, pyridinyl, mono- or di(C_{1-6} alkyl)amino, C_{1-6} alkylthio, benzylthio, pyridinylthio or pyrimidinylthio; cyclo C_{3-12} alkyl; cyclohexenyl; amino; arylcyclo C_{3-12} alkylamino; mono-or-di(C_{1-6} alkyl)amino; mono- or di(C_{1-6} alkyloxycarbonyl C_{1-6} alkyl)amino; mono- or di(C_{1-6} alkyloxycarbonyl)amino; mono-or di(C_{2-6} alkenyl)amino; mono- or di(aryl C_{1-6} alkyl)amino; mono- or diarylamino; aryl C_{2-6} alkenyl; furanyl C_{2-6} alkenyl; piperidinyl; piperazinyl; indolyl; furyl; benzofuryl; tetrahydrofuryl; indenyl; adamantyl; pyridinyl; pyrazinyl; aryl or a radical of formula (a-1); a sulfonamid $\text{-NH-SO}_2\text{-R}^{10}$ wherein R^{10} represents C_{1-6} alkyl, mono- or poly halo C_{1-6} alkyl, aryl C_{1-6} alkyl or aryl;

R^3 and R^4 each independently represent hydrogen; C_{1-6} alkyl; C_{1-6} alkyloxy C_{1-6} alkyl; C_{1-6} alkyloxycarbonyl; or

R^2 and R^3 may be taken together to form $\text{-R}^2\text{-R}^3\text{-}$, which represents a bivalent radical of formula $\text{-(CH}_2)_4\text{-}$, $\text{-(CH}_2)_5\text{-}$, $\text{-Z}_4\text{-CH=CH-}$, $\text{-Z}_4\text{-CH}_2\text{-CH}_2\text{-CH}_2\text{-}$ or $\text{-Z}_4\text{-CH}_2\text{-CH}_2\text{-}$, with Z_4 being O, S, SO_2 or NR^{11} wherein R^{11} is hydrogen, C_{1-6} alkyl, benzyl or C_{1-6} alkyloxycarbonyl; and wherein each bivalent radical is optionally substituted with C_{1-6} alkyl;

or R^3 and R^4 may be taken together to form a bivalent radical of formula -CH=CH-CH=CH- or $\text{-CH}_2\text{-CH}_2\text{-CH}_2\text{-CH}_2\text{-}$;

R^5 represents hydrogen; piperidinyl; oxo-thienyl; tetrahydrothienyl, aryl C_{1-6} alkyl; C_{1-6} alkyloxycarbonyl C_{1-6} alkyl or C_{1-6} alkyl optionally substituted with a radical $\text{C(=O)NR}_x\text{R}_y$, in which R_x and R_y , each independently are hydrogen, cyclo C_{3-12} alkyl, C_{2-6} alkynyl or C_{1-6} alkyl optionally substituted with cyano, C_{1-6} alkyloxy or C_{1-6} alkyloxycarbonyl;

Y represents O or S;

or Y and R^5 may be taken together to form $\text{=Y-R}^5\text{-}$ which represents a radical of formula

-CH=N-N= (c-1); or

-N=N-N= (c-2);

aryl represents phenyl or naphthyl optionally substituted with one or more substituents selected from halo, C_{1-6} alkyloxy, phenyloxy, mono-or di(C_{1-6} alkyl)amino and cyano;

and when the $R^1-C(=X)$ moiety is linked to another position than the 7 or 8 position, then said 7 and 8 position may be substituted with R^{15} and R^{16} wherein either one or both of R^{15} and R^{16} represents C_{1-6} alkyl or R^{15} and R^{16} taken together may form a bivalent radical of formula $-CH=CH-CH=CH-$.

3. (Currently Amended) A radiolabelled compound according to claim 1, wherein, any one of claims 1-2, characterized in that,

X represents O;

R^1 represents C_{1-6} alkyl; cyclo C_{3-12} alkyl or (cyclo C_{3-12} alkyl) C_{1-6} alkyl, wherein one or more hydrogen atoms in a C_{1-6} alkyl-moiety or in a cyclo C_{3-12} alkyl-moiety optionally may be replaced by C_{1-6} alkyloxy, aryl, halo or thienyl;

R^2 represents hydrogen; halo; C_{1-6} alkyl or amino;

R^3 and R^4 each independently represent hydrogen or C_{1-6} alkyl; or

R^2 and R^3 may be taken together to form $-R^2-R^3-$, which represents a bivalent radical of formula $-Z_4-CH_2-CH_2-CH_2-$ or $-Z_4-CH_2-CH_2-$ with Z_4 being O or NR^{11} wherein R^{11} is C_{1-6} alkyl; and wherein each bivalent radical is optionally substituted with

C_{1-6} alkyl;

or R^3 and R^4 may be taken together to form a bivalent radical of formula

$-CH_2-CH_2-CH_2-CH_2-$;

R^5 represents hydrogen;

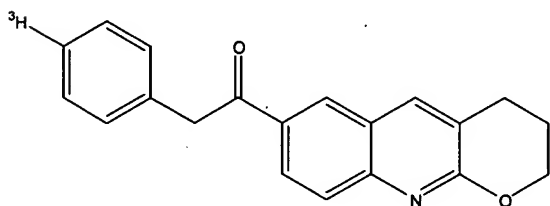
Y represents O; and

aryl represents phenyl optionally substituted with halo.

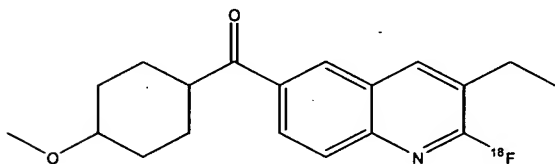
4. (Currently Amended) A radiolabelled compound according to claim 1, wherein, any one of claims 1-3, characterized in that the $R^1-C(=X)$ moiety is linked to the quinoline or quinolinone moiety in position 6.

5. (Currently Amended) A radiolabelled compound according to claim 1, wherein any one of claims 1-4, characterized in that the compound contains at least one radioactive atom.

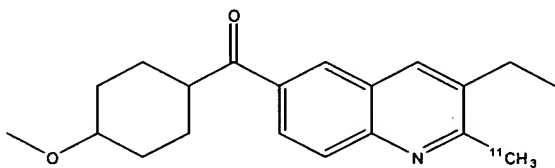
6. (Currently Amended) A radiolabelled compound according to claim 5, wherein ~~characterized in that~~ the radioactive isotope is selected from the group of ^3H , ^{11}C and ^{18}F .
7. (Currently Amended) A radiolabelled compound according to claim 6, wherein ~~characterized in that~~ the compound is any one of compounds (a), (b), (c), (d) and (e) :



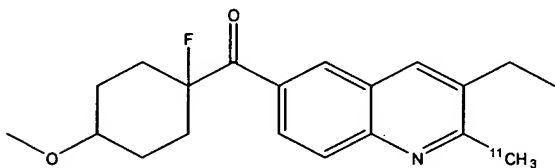
(a)



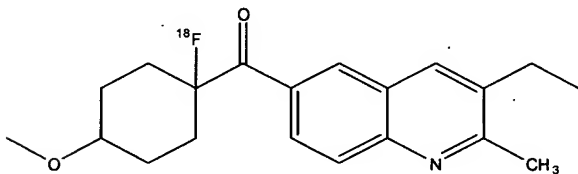
(b)



(c)



(d)



(e)

8. (Currently Amended) A radiolabelled compound according to claim 6, wherein, ~~characterized in that~~ the compound is compound (a).

9. (Currently Amended) Radioactive composition for the administration to mammals comprising a therapeutically effective amount of a radiolabelled compound according to claim 1 ~~any of claims 1-8~~ and a pharmaceutically acceptable carrier or diluent.
10. (Currently Amended) A radiolabelled compound according to claim 1 ~~any one of claims 1-8 or a composition according to claim 9~~ for use in a diagnostic method.
11. (Currently Amended) A radiolabelled compound according to claim 1, wherein ~~any one of claims 1-8 or a composition according to claim 9~~, characterized in that the diagnostic method consists of marking or identifying a mGlu1 receptor in biological material.
12. (Currently Amended) A radiolabelled compound according to claim 1, wherein ~~any one of claims 1-8 or a composition according to claim 9~~, characterized in that the marking consists of administering the radiolabelled compound to biological material and the identifying consists of detecting the emissions from the radiolabelled compound.
13. (Currently Amended) A radiolabelled compound according to claim 1, wherein ~~any one of claims 1-8 or a composition according to claim 9~~, characterized in that the diagnostic method consists of screening whether a test compound has the ability to occupy or bind to a mGlu1 receptor in biological material.
14. (Currently Amended) A radiolabelled compound or composition according to claim 1, wherein ~~any one of claims 11-13~~, characterized in that the biological material is selected from the group of tissue samples, plasma fluids, body fluids, body parts and organs originating from warm-blooded animals and warm-blooded animals *per se*, in particular humans.
15. (Currently Amended) A radiolabelled compound according to claim 1 ~~any one of claims 1-8 or a composition according to claim 9~~ for the manufacture of a diagnostic tool for marking or identifying an mGlu1 receptor in biological material.

16. (Currently Amended) Use of a radiolabelled compound or composition according to claim 15, wherein ~~characterized in that~~ the marking consists of administering the radiolabelled compound to biological material and the identifying consists of detecting the emissions from the radiolabelled compound.
17. (Currently Amended) A radiolabelled compound according to claim 1 ~~any one of claims 1-8 or a composition according to claim 9~~ for the manufacture of a diagnostic tool for screening whether a test compound has the ability to occupy or bind to a mGlu1 receptor in biological material
18. (Cancelled)
19. (Cancelled)
- 20 (Cancelled)